

THE PANAMA ABYSS.

A Crisis Near at Hand for M. De Lesseps' Gigantic Enterprise.

An Array of Financial Figures Large Enough to Stun an Ordinary Person.

Interview with the Chief Engineer of the Slaven Dredging Company.

He Asserts That the Work Can Be Done Only by American Men and Money.

It has cost some hundreds of millions of dollars to demonstrate to Count Ferdinand de Lesseps that stone has not the degree of permeability possessed by sand. It was no trick at all to dig a hole through the granulated

of its commerce, an incomplete canal, not more than fifteen feet in depth (4.57 meters), and burdened with debts exceeding \$1,000,000,000.

The face of M. de Lesseps appears in the illustration accompanying this article, and beneath it is a view of the great hole, the Panama canal. The most daring of the world's engineers, it is mournfully appropriate that his greatness should be doomed to burial in the most stupendous work that man ever attempted. For it seems to-day absolutely certain that the canal will never be completed. The money expended to date—almost entirely from the people of France—amounts to 1,000,000,000 francs (\$212,000,000) and nearly every franc has been expended. All except \$18,500,000 paid for the railroad has gone into the abyss. To complete the excavation, the experts say, will require 800,000,000 francs more; to build the locks and fit up the ports 200,000,000 francs more; and to provide the necessary dams and reservoirs 200,000,000 francs more, making a total of \$1,200,000,000 francs still to be raised and expended. But, estimating the time required to complete the work at five years, the company

opinion as to the future of the Panama canal. He said:

"Nobody here who knows anything at all about the canal can believe that the route will be opened to commerce in 1894, as De Lesseps has promised the stockholders of the company. For that matter, the canal is to-day just as far from being opened as it was two years ago. Our work here is progressing rapidly, and we intend to complete the same as required from us per contract this year. All there is left for us to do now is to excavate the portion we see here before you between the Dingle and the City of Paris, and then we will have to go over the entire route once more, commencing at Colon and working up to Bohio, in order to make the canal nine metres deep. The mean trouble with the enterprise lies in its management, and I am willing to say that De Lesseps will never finish the canal."

"Can the canal be finished at all?" "Certainly. There is nothing on the whole route, no engineering difficulties so great that they could not be overcome. Let De Lesseps step out and a respectable business concern take charge of the work, and I can see no reason why this canal could not be completed within four or five years."

"All that is wanted down here now," said Mr. Germann, "is an American company with American capital at the head of the concern, and the Panama canal will be the great canal of the world. I know that De Lesseps himself is no engineer; he is a financier, and the old man would gladly give his last dollar to have this canal finished; yes, he would take the coat from his back if he thought that by doing so he would push the canal work along. But he is surrounded by a number of his advisers who lead him on, and thereby enrich themselves, while at the same time they ruin the reputation of Count Ferdinand de Lesseps."

From personal observation, as well as good information obtained during my stay along the Isthmus of Panama, I have come to the conclusion that all the engineering difficulties can be overcome, and that the Panama canal could be finished within four or five years, provided the present management would step out and leave the finishing of the great water route to some good company. GUS. C. ROEDER.

BOULANGER.

Some Interesting Points Anent That Man on Horse-back.

Those Who Come in Personal Contact with Him Charmed by His Manners.

It is curious to note the ceaseless interest with which the world follows French history and politics. Events in Paris echo round the world in a way commanded by the incidents of no other metropolis. Mr. Frederic Harrison, who, like all the Postivists, regards France with something like filial love, contrasted the conqueror and the conquered in 1871; all eyes, he said, were fixed on Paris, none on Berlin; the vanquished was the object of attention, not the victor. It was quite true, but the inference he drew—the superiority of the French over the Germans—was not just. France is an interesting country because of its contrasts. It does by short leaps and bounds what in other lands is achieved after centuries, or at least generations, of growth and development. In 1789 France leaped from the England of the Tudors to a point far beyond the England of the Guelphs. The suddenness of the change was fascinating in itself. Principles of political liberty which had been taught soberly and carried out sensibly in England a century before were suddenly flashed upon Europe by men of wit writing in a language known by every aristocracy in every court; they were not new to us, but they were new to Italians, Germans, Spaniards, and Danes. There is another cause for the attractiveness of France. She resembles among na-

tional story of France. We know not what she may do next; what hero, lover, adventurer, or scapegrace she may take up; what wild fury of maniac rage like the Commune may possess Paris; what mad march on the frontier may hurl her across the Rhine.

Gen. Boulanger is the popular idol of the mercurial Frenchmen at the present hour, and is unquestionably the most conspicuous figure in the republic. We present herewith a most excellent picture of him, reproduced from a faithful photograph. The General is now just 50 years old. He is noted for his grace and gallantry, and more than any other Frenchman is the idol and the especial hero of the ladies. No one else can open a fan or remove a lady's cloak or mount a restless horse in so graceful and charming a way, and the same qualities are said to characterize all his military actions. A recent letter from Paris has this entertaining gossip about this much discussed man:

"Boulanger! General de la redoute! is still the popularity, and the electric idea with which the atmosphere of Paris is charged, writes a correspondent of the *Pall Mall Gazette*. Every one is discussing Boulanger. But I notice that while the leaders are more or less excited the people generally are tranquil. Boulanger is not a fever. It is a strong belief in a personality, a confidence in Boulanger's merits and in his future, mingled with an indignation which is not at all hysterical, but only persistent and determined, at the treatment which he has received. I am living in the same hotel with the General. It is the Hotel du Louvre. Suddenly through the hotel a whisper runs: 'M. le General descend.' He is coming. The General's servant, is led into the court of the hotel



MARIAN HARLAND.

—into the very court, mind you, where no vehicle or horse of any other mortal is ever admitted.

M. le General comes down stairs. All the windows of the hotel which look onto the court are crowded—crowded with guests, messieurs et mesdames, crowded with garcons and femmes de chambre. A page brings a wooden stool for the General to mount from. The General appears in English riding costume, he mounts, all the crowd in the court salute him respectfully, he rides forth, and we disperse with a feeling that 'Vive Boulanger' is in the air. An eminent English politician, who is in Paris to-day, said to me: 'Boulanger enjoys a marvelous personal popularity. I think he deserves it. I have been in the habit of putting up at this hotel for years, and he has often been here at the same time. The enthusiasm of all the hotel people for him is unbounded. He wins this popularity by his amiability and absence of swagger.'

The best informed people think that he has not the remotest desire to make himself dictator or to make himself anything. Politics he does not understand in the least. But his great merit, in the view of those capable of judging, is this: He saw that what the French army needed was to be put in good heart, and to feel the old esprit de corps, which had been damped by a long, inglorious peace. For this reason he assumed all his style as general—the black charger, the dazzling uniform. He said, in effect: 'The army wants a little encouragement. I shall make myself its spokesman, its representative. And at the same time I shall show myself *bonne mine* on all occasions, and create some warmth, some hope, some enthusiasm in the army and in the sentiments of the people toward it. This is my role. I confine myself to it.'

In fact, the motto of Gen. Boulanger is in the words he repeats a thousand times and is never tired of repeating, the words he repeated to me when I interviewed him: 'Si je voulais la guerre, je serais un fou; si je ne m'y préparais pas, je serais un misérable.'

Is Boulanger Another Napoleon. For or against Boulanger. Thus the French republic seems to be politically divided at present, says an exchange.



GENERAL BOULANGER.

tions the ladies whom Carlyle nicknamed 'high-class unfortunates.' She is always committing indiscretions. In any social circle, the steady matron or the happy maid offers little to the pen of the poet, the novelist, or the dramatist; but when impulse, accident, or calamity drives a woman or girl from the shade and shelter of home, then her emotions, her adventures, her hours of fleeting pleasure, her renance of pain, fascinate readers as they follow a Manon Lescaut, a Carmen, or a Sappho through vicissitudes and sorrows. That is the character of the

are arrayed against him. Cast from his military position, they thought he would drop into obscurity; but the people, encouraged by the Bonapartists, who see their opportunity in the feverish state of the nation, have showered honors upon him. With or without his candidacy votes are cast for him wherever elections occur throughout the country.

Such popularity is without precedent. Boulanger seems practically the master of France. It remains to be seen what use he will make of his power.

Boulanger Opposes Aggression. A recent cable dispatch from Paris says that 'Gen. Boulanger has written a letter protesting against the warlike ideas that have been attributed to him. He wishes now to declare distinctly that Democratic France is maligned by being credited with thoughts of aggression, to which he has ever been, and still remains, resolutely opposed.'

GILMORE.

Portrait and Sketch of the Great Band Leader.

Patrick Sarsfield Gilmore, probably the most renowned and certainly the best known band leader in the United States, was born in Dublin, Ireland, Dec. 28, 1828. At the age of 15 he connected himself with military bands, and at once showed a remarkable talent and aptitude. So well was the youngster thought of that he was taken to Canada along with a crack English band. After that engagement was at an end he went to Salem, Mass., and became leader of a band there. He soon found, however, that his talents demanded a wider field, and he went to Boston, Massachusetts, where he organized 'Gilmore's Band,' and made such a success therewith that he was enabled to make an extensive and successful tour of the various cities of the country. In 1861 he accompanied the Twenty-fourth Massachusetts Regiment to the field, and in 1863 was placed in charge of all the bands in Louisiana by General Banks. He originated monster concerts in this country, and was the projector of the great 'Peace Jubilee,' held in Boston in 1869-72, and published an account of the first thereof. This account was published at Boston in the year 1871. Seven years after the latter date he made a European tour with his band, and created quite a furor in the large cities there. He is now Bandmaster of the Twenty-second Regiment National Guards of the State of New York. Bandmaster Gilmore has composed and revised many marches and songs, the most renowned being his American National Hymn.

MARIAN HARLAND. Portrait and Brief Sketch of a Familiar Artist.

The name of Marian Harland, the authoress, has long been a familiar one in literary circles, and from her pen, which is guided by a gentle, firm hand, and wielded by a firmer brain, have emanated some of the purest sentiments of modern literature. Marian Harland is one of the busiest women of our country to-day. While conducting the household department for a syndicate of fifteen papers, she, in addition to this, does editorial work in *Babypod* and is completing a companion volume to her 'Judith.' The new book is to be entitled 'In Old Virginia,' and its success is warranted to equal if not surpass that of its predecessors. A household manual entitled 'Home Making and Housekeeping' is also to be issued from her publisher within a short time. Marian Harland's golden secret of success in literature lies in the open, unaffected way in which the expressions of sentiment, contained in her writings, appeal to her readers, carrying them on from page to page with an ever-increasing interest to the finish. She is a sensible, middle-aged woman, with a motherly way about her which emanates from a deep, sincere kindness which results in winning the affections of all who come in contact with her, endearing her to all hearts. Her appearance is one of plainness coupled with a predominating sense of neatness, which pervades her whole person, her toilets being not at all calculated to win the eyes of an admiring fashion advocate. Her sincere kindness of disposition, which lies at the root of many of her actions, enables her to do and say the right thing at the right time and place, giving discreetly the advice which is so abundantly sought after and asked of her.

PROF. SIMMLER brings forward the somewhat plausible theory, that the basis of diamond formation is liquid or liquefied carbonic acid. Indeed, facts observed by different savants tend to show, it is said, the presence of this agent in the coating of the most valuable gems. Upon the bursting of such crystals there are often found to occur two liquids in the cavities, the one behaving like water, the other like liquid carbonic acid. On one occasion, indeed, it was observed that the liquid in a quartz crystal, which was dashed to pieces, scattered its contents around with a great noise, burning holes in the handkerchief wound around the hands of the experimenter. The acid content itself had disappeared. Under these circumstances M. Simmler argues that, if carbon be soluble in liquid carbonic acid, it would then only be necessary to subject the solvent to slow evaporation. The carbon would thereby be deposited, and, by taking proper care, assume crystalline forms, and in evaporating quickly the so-called black diamond, which in the state of powder, is much used for polishing, the colorless diamond might be produced. Though the liquid in question has never been subjected to chemical analysis, the formation of liquid carbonic acid in the interior of our globe may, it is admitted, be considered as highly probable.

For some time past the builders in Germany have resorted to the use of a composition of cork, sand and lime, molded into bricks, for the construction of light partition walls. This is said to exclude sound better than ordinary brickwork, while being light and a good non-conductor of heat and cold.

SATAN'S ENCYCLOPEDIA.



For long, long years I've kept my books away from sight of man; But he who on this column looks May read it if he can. Discard your so-called knowledge now—Begin again anew; From words below, in wisdom grow, For what I write is true.

ARAB—A news reporter.

BAND—An imitation of a cat corral in flames.

COLLEGE—An institution for training young men to kick a foot-ball in Homeric Greek fashion.

DUMPLINGS—Boarding-house cannon balls.

EEL—A debtor.

FAIRER—A vegetable juggler.

GREEKS—Old residents in Limerick.

HEART—A bust padding of flint, worn by fashionable female flirts.

ISAAC—A vuncular relative of everyone save himself.

JESTER—The obituary editor on the London *Punch*.

KIN—Conventional sponges.

LADY—The boss of the kitchen, who sits around the house while the family hustle for grub.

MAP—A design made by industrious cockroaches, who bathe in ink, then crawl over paper in war times for James Gordon Bennett to have their tracks photographed as a startling sample of the progressiveness of the New York *Herald*. Usually labeled, 'Surveyed by your correspondent on the spot.' Spot, 3,000 square miles.

NEWSPAPER—A daily magnifier of horrors, calamities and scandal.

OLLAPODRIA—Spanish for boarding-house soup.

POST—A boy half started on an unwilling errand.

QUAGMIRE—Editorial ink.

REQUIEM—A humorous anthem said over the skeleton of deceased newspaper men.

SIDEBARDS—Little knots of hair worn in front of the ears to hold up the cheek of bashful drummers.

TABLE-D'HOTE—Poorhouse soup form.

US—Not you.

VOID—A nothingness in the head of the rhyming san-tum-bore.

WHIMS—What we have when writing this column.

XYSTER—An instrument for scraping the inside of a poet's skull.

YES—A word that makes a man feel disappointed when his heart's choice fails to utter it, and makes him doubly disappointed in her in after years, if she does utter it.

ZETTER—What readers of this column may occasionally be obliged to institute.

The Etiquette of Parting.

The social etiquette that regulates the time a young man will tear himself away from his very best girl is not so rigid in the rural districts as in the city. When the clock hands swing around toward ten and the pretty maiden by his side reminds him of the fact, the city again goes home. Not so the youth in the rural district. Toward 11 o'clock his Janie says:

"Do you know what time it is, Ned Bangs?"

"Course I do," he replies, smartly.

"Well, I guess you'd better put out for home."

"What's the rush?"

"I'd say 'rush' if I were you, when it's most midnight."

"I don't care if it's most midnight."

"Well, I do, and you shan't stay here one second after midnight."

"Bet you a cookie I do."

"No, you shan't. I'll call pa, see if I don't."

"Oh, yes, you will."

"You'll see."

"I'll risk it."

"Oh, you're perfectly horrid! Now, you get your hat and clear out."

"Oh, pshaw, you'd be mad if I did."

"You wretch! You've got to go right away, or saying that."

"You don't say so."

"I do, too; and I—I—if you dare kiss me again!"

He dares.

"Oh, oh, oh! You are the meanest fellow. I've a notion to box your ears."

"Box away."

"When are you going home?"

"When I get a good ready."

"Pa'll start you if he comes in."

"He won't come in."

"Don't be too sure of that. If ma sees the light she'll scold."

"Let's put it out."

"No, you shan't! You'd better put yourself out."

"See if I do."

"You'll sit here with the cat then. I shan't keep you company."

"Poo! A team of horses couldn't drag you away."

"Oh, you horrid, horrid thing!"

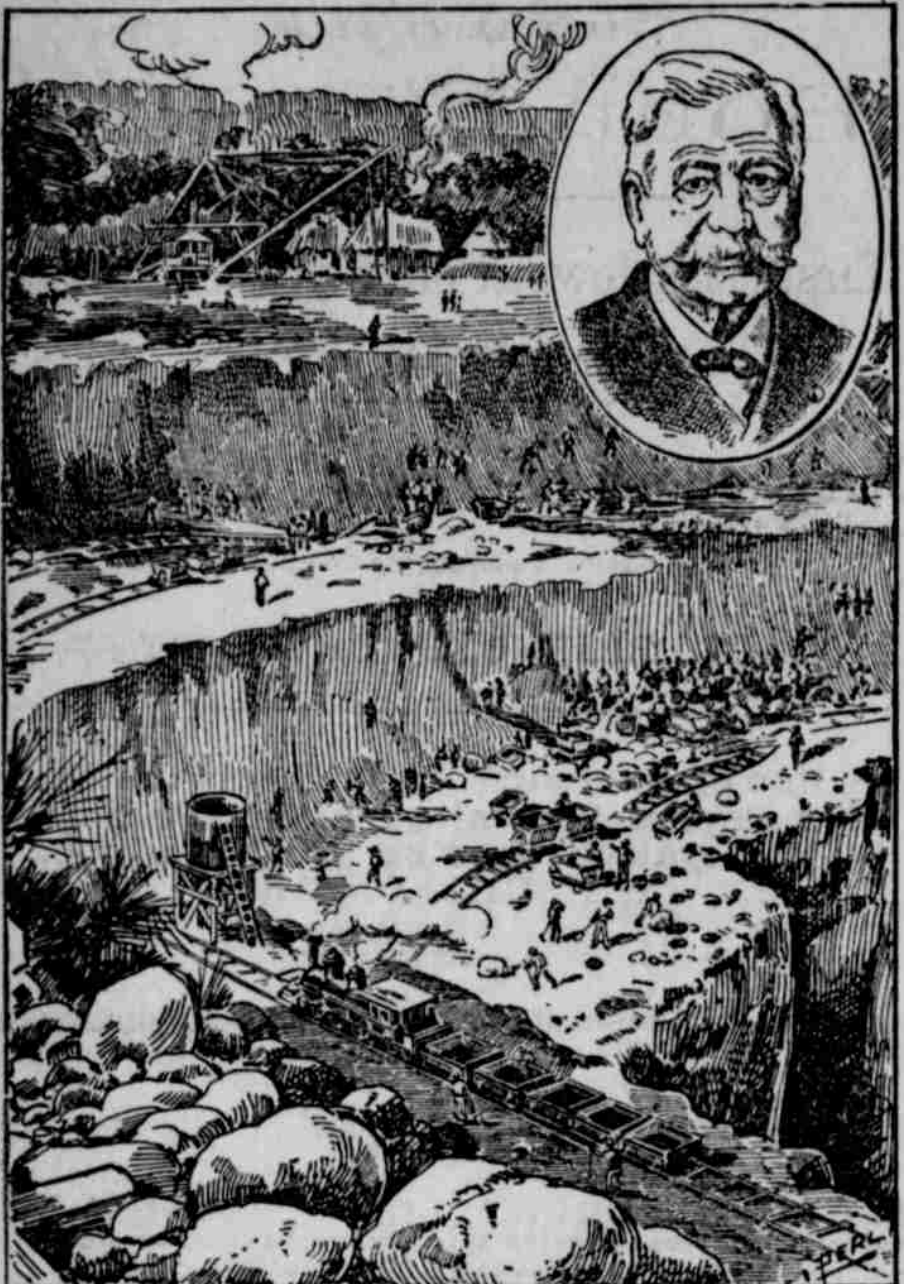
But it is midnight before he goes, all the same, and he hasn't had to sit with the cat either.—*The Bits*.

A Fatal Omission.

Old Man (to daughter)—Clara, I discovered Nero lying dead in the yard this morning.

Daughter—I am very sorry, papa, but I can't help it. You knew very well that young Mr. Harvard was coming to see me last night, and you should have tied the dog out of harm's way.—*New York Sun*.

The battle of Agincourt, where Henry V. of England, with about 5,000 men, defeated about 60,000 French, took place Oct. 25, 1415. The village of Agincourt, near where this battle was fought, and which gives the contest its name, is situated in the north of France.



COUNT FERDINAND DE LESSEPS AND THE GREAT DITCH.

plain of Suez; but canalizing the solid rocks of Panama is quite a different thing. This is at last admitted by De Lesseps, and he now proposes to change his work from a sea level to a lock canal. But will the undertaking, even in its new shape, ever be a success? Can its promoters ever raise the vast sums needed for its completion? *Le Genie Civil*, the most prominent engineering periodical in France, has an article in a recent number on the subject of the proposed alteration in the plan of the canal. The statistics it presents must certainly startle the Gallic enthusiasts who have been inveigled into dumping money by the cart-load into a big ditch which promises to remain for all time "without form and void." Following is a synopsis of statements made by this French scientific authority, which, by the way, is not hostile to the enterprise:

"The five divisions into which the line of the canal at Panama is divided contained at the outset 135,000,000 cubic meters to be removed. The accomplishment, up to this time, has been as follows: In the first division, from Aspinwall westward, three-fifths of the excavation, and in the fifth division, from Panama eastward, one-third; in the second and third divisions, from Taverilla to Emperador, one-

will have paid 65,000,000 francs of interest on its obligations, which makes a total of 1,565,000,000 francs to be added to the 1,000,000,000 already gone—an aggregate of 2,565,000,000 francs!

And even this is not all. In order to raise 1,000,000,000 francs the company has had to issue obligations amounting to 1,675,500,000 francs, and if the additional 1,565,000,000 required should be raised on similar terms, the total obligations would be 4,121,504,000 francs, or \$817,725,500!

But this total, enormous as it is, is deduced in the main from the figures most recently stated by De Lesseps. Tested by results, his figures must be multiplied. His original estimate for the entire cost of the canal was \$120,000,000, which he raised; after that sum gave out, he increased his estimate to \$214,000,000, then to \$240,000,000, and finally to \$300,000,000, where he stopped.

The two greatest obstacles to the work are the peculiar hill section of the isthmus called the Culebra, which is formed of greasy clay that slides, and the Chagres River, which the canal crosses twenty-eight times, and which is often converted into a resistless torrent by the heavy rainfall. The deadly climate is another obstacle, but high wages have kept the force of men and officers at a total exceeding 11,000, the dead being rapidly replaced. It is here interesting to note that the principal hospital maintained by the company has cost over \$30,000.

LETTER FROM ASPINWALL.

An Interview with One of the Contractors on the Great Ditch. [From the Boston Globe.]

ASPINWALL, April 10. The great question which interests everybody at Aspinwall, Panama, and all over the Isthmus, is the one in connection with the opening of the Panama Canal.

Count Ferdinand de Lesseps has named 1890 as the year when he intends to sail across his water route from ocean to ocean, but it is very doubtful whether Ferdinand believes in his prophecy.

M. Jacquier, Director General of the Panama Canal Company, stationed at Panama, declines to speak on the subject except when closely questioned by admiring Frenchmen, and then, of course, he joins in and with enthusiasm shouts 1890.

M. St. Anne, chief engineer of the French company, however, does not agree with his superiors, and told me that he expected to be present at the ceremonies incident to the opening of the Panama Canal in 1893.

Frank Germann, Chief Engineer of the American Dredging Company (Slaven & Co.), goes still further, and states that the Panama Canal can never be a canal as long as De Lesseps and his associates are the recognized leaders of the great enterprise, but at the same time points out that the canal could be finished within four or five years from date if American engineers would undertake its management.

I asked Mr. Germann to give me his



PATRICK SARSFIELD GILMORE.

eighth each, and in the fourth division, La Culebra, two twenty-sevenths. Of the total accomplishment of 30,665,666 cubic meters out of the 135,000,000 to be extracted 19,666,666 comes from the Atlantic and Pacific sections, where the earth is soft and the dredges encounter no serious obstacles. From the three central and difficult divisions 11,000,000 cubic meters have been extracted, after seven years' operations, and out of a total of 66,000,000 cubic meters, as claimed by the company, it would require twenty-five years to complete the work at the same rate of progress. In that time, even at the present rate, the aggregate interest of the existing debt, uncompounded, would amount to \$200,000,000, and the world would have, for the requirements